

**Specimen data to the phylogenetic study of the tribe Barbitistini  
(Orthoptera: Tettigonioidea: Phaneropteridae) in Ullrich et al. 2010**

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**Abstract**

Locality data and additional information are given for the specimens the study of ULLRICH et al. 2010 is based on.

**Zusammenfassung**

Wir geben hier genaue Fundortangaben und weitere Informationen zu den Tieren, auf denen die Untersuchung von ULLRICH et al. 2010 beruht.

Analysing phylogenetic relationships based on the study of DNA sequences becomes more and more important in all groups of living organisms. While the interpretation of the data may remain controversial in some cases, published sequence information can easily be used for new and improved calculations.

Several papers of this type have also been published about Orthopteran species with the sequence information deposited in Genbank. In this databank, however, there seems to be no obligatory field for information about the locality where the organism in question has been collected. Only the country has to be mentioned. For many analyses this restriction may be not important. In groups with many local species, however, it will cause problems. For example, neither relationships between different populations within one country can be reproduced using the published data, nor it can be resolved which population(s) may belong to species recognized afterwards as new species.

The flightless group Barbitistini is a typical example of such difficult case. It contains 269 valid species with 52 valid subspecies (OSF) many of them with quite restricted ranges. The phylogenetic relationships of most of its genera and of about 110 species/subspecies have been studied by ULLRICH et al. 2010. The sequence data of all specimens are deposited in Genbank (see Supplementary Material of ULLRICH et al. 2010, SM0001.doc), however, without information about the collecting side except country. Without this information the data cannot be used in future studies, where biogeographical questions are addressed. Of course, it would be even more helpful, if additional information about the specimens would be available (e.g. individual code, depository), e.g., to clarify or correct misidentifications. Since at the moment these data are still available, we present them here. The phylogeny and evolution of this group is still an intensively studied topic (e.g. HELLER et al. 2011, IORGU 2012, KAYA et al. 2012a, 2012b, SZÖVÉNYI et al. 2012, CHOBANOV et al. 2013, BOZTEPE et al. 2013) and documented DNA data are a very valuable resource.

In the paper ULLRICH et al. (2010) present two phylogenetic trees, one based on nuclear sequences (internal transcribed spacer 1 and 2, Fig. 3a, p. 24), the other on mitochondrial DNA, Fig. 3b, p. 25). In Table 1 we give two lists of the species names as they appear in the trees from top to bottom together with the respective specimen numbers. In Table 2 locality data are presented for the specimens ordered by number. In Table 3 additional information about the specimens can be found. The specimen of *Poecilimon luschani luschani* from Turkey, Balikeshir: Kazdagi, Sarikiz belongs to the newly described species *P. helleri* following BOZTEPE et al. 2013.

Table 1: Linking of species names as in Fig. 3 of ULLRICH et al. 2010 and specimen numbers. Abbreviations: P. = *Poecilimon*; # = specimen number (see Table 2); others see text.

ITS sequences - Figure 3A	#	Mito. sequences - Figure 3B	#
<i>P. ornatus</i>	26	<i>P. harzi</i>	30
<i>P. ornatus</i>	38	<i>P. mistshenkoi mistshenkoi</i>	24
<i>P. ornatus</i>	44	<i>P. affinis</i>	1
<i>P. ornatus</i>	45	<i>P. ornatus</i>	38
<i>P. affinis rilensis</i>	4	<i>P. ornatus</i>	44
<i>P. harzi</i>	30	<i>P. hoelzeli</i>	33
<i>P. mistshenkoi mistshenkoi</i>	24	<i>P. pindos</i>	75
<i>P. gracilioides</i>	59	<i>P. ornatus</i>	26
<i>P. soulion</i>	94	<i>P. ornatus</i>	45
<i>P. hoelzeli</i>	33	<i>P. affinis rilensis</i>	4
<i>P. pindos</i>	75	<i>P. obesus</i>	29
<i>P. artedentatus</i>	133	<i>P. obesus</i>	88
<i>P. obesus</i>	48	<i>P. obesus</i>	48
<i>P. obesus</i>	29	<i>P. nobilis</i>	2
<i>P. obesus</i>	88	<i>P. artedentatus</i>	133
<i>P. affinis</i>	1	<i>P. gracilioides</i>	59
<i>P. gracilis</i>	11	<i>P. soulion</i>	94
<i>P. nobilis</i>	2	<i>P. gracilis</i>	11
<i>P. tschorochensis</i>	162	<i>P. tschorochensis</i>	162
<i>P. jonicus jonicus</i>	31	<i>Phonochorion satunini</i>	77
<i>P. heroicus</i>	65	<i>P. lodosi</i>	20
<i>P. bifenestratus</i>	147	<i>P. puleher</i>	54
<i>P. schmidtii</i>	127	<i>P. sanctipauli</i>	93
<i>Polysarcus denticauda</i>	100	<i>P. sanctipauli</i>	95
<i>P. mytilenensis brevissimus</i>	63	<i>P. varicornis</i>	159
<i>P. mytilenensis brevissimus</i>	89	<i>P. zonatus</i>	152
<i>P. mytilenensis mytilenensis</i>	68	<i>P. tauricola</i>	161
<i>Phonochorion satunini</i>	77	<i>P. heroicus</i>	65
<i>P. lodosi</i>	20	<i>P. bifenestratus</i>	147
<i>P. pulcher</i>	54	<i>P. schmidtii</i>	127
<i>P. sanctipauli</i>	93	<i>P. jonicus jonicus</i>	73

ITS sequences - Figure 3A	#	Mito. sequences - Figure 3B	#
<i>P. sanctipauli</i>	95	<i>P. jonicus jonicus</i>	31
<i>P. varicornis</i>	159	<i>P. jonicus lobulatus</i>	35
<i>P. zonatus</i>	152	<i>P. jonicus jonicus</i>	6
<i>P. tauricola</i>	161	<i>P. wernerii</i>	13
<i>P. brunneri</i>	101	<i>P. wernerii</i>	37
<i>P. brunneri</i>	106	<i>P. jonicus superbus</i>	84
<i>P. brunneri</i>	108	<i>P. jonicus tessellatus</i>	27
<i>P. brunneri</i>	98	<i>P. laevissimus</i>	36
<i>P. brunneri</i>	109	<i>P. erimanthos</i>	97
<i>P. brunneri</i>	14	<i>P. erimanthos</i>	21
<i>P. ukrainicus</i>	85	<i>P. martinae martinae</i>	66
<i>P. ukrainicus</i>	148	<i>P. inflatus</i>	55
<i>P. ukrainicus</i>	150	<i>P. cretensis</i>	83
<i>P. macedonicus</i>	16	<i>Parapoeclimon antalyaensis</i>	50
<i>P. macedonicus</i>	43	<i>P. mytilenensis brevissimus</i>	63
<i>P. macedonicus</i>	18	<i>P. mytilenensis brevissimus</i>	89
<i>P. macedonicus</i>	39	<i>P. mytilenensis mytilenensis</i>	68
<i>P. elegans</i>	135	<i>Polysarcus denticauda</i>	100
<i>P. elegans</i>	144	<i>P. brunneri</i>	108
<i>P. zwicki</i>	28	<i>P. brunneri</i>	106
<i>P. zwicki</i>	32	<i>P. brunneri</i>	101
<i>P. thoracicus</i>	116	<i>P. brunneri</i>	14
<i>P. thoracicus</i>	5	<i>P. ukrainicus</i>	148
<i>P. thoracicus</i>	57	<i>P. ukrainicus</i>	150
<i>P. wernerii</i>	13	<i>P. ukrainicus</i>	85
<i>P. wernerii</i>	37	<i>P. brunneri</i>	98
<i>Parapoeclimon antalyaensis</i>	50	<i>P. brunneri</i>	109
<i>P. cretensis</i>	83	<i>P. macedonicus</i>	43
<i>P. martinae martinae</i>	66	<i>P. macedonicus</i>	18
<i>P. inflatus</i>	55	<i>P. macedonicus</i>	39
<i>P. erimanthos</i>	97	<i>P. macedonicus</i>	16
<i>P. erimanthos</i>	21	<i>P. elegans</i>	135
<i>P. laevissimus</i>	36	<i>P. elegans</i>	144
<i>P. jonicus jonicus</i>	6	<i>P. zwicki</i>	28
<i>P. jonicus jonicus</i>	73	<i>P. zwicki</i>	32
<i>P. jonicus tessellatus</i>	27	<i>P. thoracicus</i>	116
<i>P. jonicus superbus</i>	84	<i>P. thoracicus</i>	5
<i>P. jonicus lobulatus</i>	35	<i>P. thoracicus</i>	57
<i>P. mariannae</i>	34	<i>P. veluchianus veluchianus</i>	10
<i>P. zimmeri</i>	40	<i>P. veluchianus veluchianus</i>	42
<i>P. zimmeri</i>	41	<i>P. zimmeri</i>	7
<i>P. veluchianus veluchianus</i>	10	<i>P. zimmeri</i>	46
<i>P. veluchianus veluchianus</i>	42	<i>P. zimmeri</i>	40
<i>P. veluchianus minor</i>	25	<i>P. zimmeri</i>	41
<i>P. chopardi</i>	19	<i>P. veluchianus minor</i>	25

ITS sequences - Figure 3A	#	Mito. sequences - Figure 3B	#
<i>P. gerlindae</i>	3	<i>P. gerlindae</i>	22
<i>P. gerlindae</i>	22	<i>P. gerlindae</i>	103
<i>P. gerlindae</i>	103	<i>P. gerlindae</i>	3
<i>P. propinquus</i>	96	<i>P. zimneri</i>	111
<i>P. aegaeus</i>	90	<i>P. aegaeus</i>	90
<i>P. thessalicus</i>	79	<i>P. chopardi</i>	19
<i>P. thessalicus</i>	149	<i>P. mariannae</i>	34
<i>P. zimneri</i>	7	<i>P. thessalicus</i>	79
<i>P. zimneri</i>	46	<i>P. thessalicus</i>	149
<i>P. zimneri</i>	111	<i>P. propinquus</i>	96
<i>P. pergamicus</i>	69	<i>P. pergamicus</i>	69
<i>P. pergamicus</i>	78	<i>P. pergamicus</i>	78
<i>P. pergamicus</i>	91	<i>P. pergamicus</i>	91
<i>P. ampliatus</i>	110	<i>P. bilgeri</i>	56
<i>P. intermedius</i>	132	<i>P. ledereri</i>	143
<i>P. klisuriensis</i>	12	<i>P. amissus</i>	140
<i>P. ebneri</i>	15	<i>P. m. marmaraensis</i>	53
<i>P. davisii</i>	52	<i>P. davisii</i>	52
<i>P. haydari</i>	87	<i>P. ebneri</i>	15
<i>P. haydari</i>	153	<i>P. intermedius</i>	132
<i>Poecilimonella armeniaca</i>	160	<i>P. ampliatus</i>	110
<i>P. dogra</i>	64	<i>P. klisuriensis</i>	12
<i>P. m. marmaraensis</i>	53	<i>P. excisus</i>	61
<i>P. amissus</i>	140	<i>P. orbolicus</i>	17
<i>P. luschanii luschanii</i>	163	<i>P. orbolicus</i>	47
<i>P. ledereri</i>	143	<i>P. tuncayi</i>	126
<i>P. birandi</i>	49	<i>P. tuncayi</i>	137
<i>P. orbolicus</i>	17	<i>P. birandi</i>	49
<i>P. orbolicus</i>	47	<i>P. luschanii luschanii</i>	163
<i>P. tuncayi</i>	126	<i>Poecilimonella armeniaca</i>	160
<i>P. tuncayi</i>	137	<i>P. dogra</i>	64
<i>P. excisus</i>	61	<i>P. haydari</i>	87
<i>P. bilgeri</i>	56	<i>P. haydari</i>	153
<i>P. richteri</i>	145	<i>P. kusnezovi</i>	123
<i>P. n. sp. 2</i>	151	<i>P. scythicus</i>	70
<i>P. anatolicus</i>	9	<i>P. n. sp. 2</i>	151
<i>P. heinrichi</i>	118	<i>P. richteri</i>	145
<i>P. cervus</i>	158	<i>P. ersisli</i>	129
<i>P. bosporicus</i>	154	<i>P. syriacus</i>	157
<i>P. n. sp. 1</i>	142	<i>P. serratus</i>	117
<i>P. sureyanus</i>	141	<i>P. izmirensis</i>	62
<i>P. similis</i>	125	<i>P. ege</i>	67
<i>P. demirsoyi</i>	121	<i>P. xenocercus</i>	156
<i>P. scythicus</i>	70	<i>P. karabukensis</i>	136
<i>P. turciae</i>	115	<i>P. karabukensis</i>	138

ITS sequences - Figure 3A	#	Mito. sequences - Figure 3B	#
<i>P. turcicus</i>	146	<i>P. karakushi</i>	58
<i>P. turcicus</i>	99	<i>P. angulatus</i>	155
<i>P. miramae</i>	119	<i>P. obtusicercus</i>	124
<i>P. kusnezovi</i>	123	<i>P. anatolicus</i>	9
<i>P. naskrecki</i>	120	<i>P. turcicus</i>	146
<i>P. izmirensis</i>	62	<i>P. n. sp. 1</i>	142
<i>P. serratus</i>	117	<i>P. turcicus</i>	99
<i>P. karabukensis</i>	136	<i>P. turciae</i>	115
<i>P. karabukensis</i>	138	<i>P. miramae</i>	119
<i>P. obtusicercus</i>	124	<i>P. demirsoyi</i>	121
<i>P. angulatus</i>	155	<i>P. similis</i>	125
<i>P. ege</i>	67	<i>P. cervus</i>	158
<i>P. karakushi</i>	58	<i>P. heinrichi</i>	118
<i>P. xenocercus</i>	156	<i>P. naskrecki</i>	120
<i>P. syriacus</i>	157	<i>P. bosphoricus</i>	154
<i>P. paros</i>	23	<i>P. sureyanus</i>	141
<i>P. paros</i>	134	<i>P. paros</i>	23
<i>P. hamatus</i>	74	<i>P. paros</i>	134
<i>P. hamatus</i>	92	<i>P. hamatus</i>	74
<i>P. ikariensis</i>	81	<i>P. hamatus</i>	92
<i>P. unispinosus</i>	82	<i>P. deplanatus</i>	128
<i>P. deplanatus</i>	128	<i>P. ikariensis</i>	81
<i>P. ersisi</i>	129	<i>P. unispinosus</i>	82
<i>Barbitistes ocskayi</i>	131	<i>Andreiniimon nuptialis</i>	80
<i>Barbitistes serricauda</i>	104	<i>Isophya modesta rossica</i>	107
<i>Ancistrura nigrovittata</i>	8	<i>Leptophyes punctatissima</i>	102
<i>Metaplastes ornatus</i>	122	<i>Barbitistes ocskayi</i>	131
<i>Andreiniimon nuptialis</i>	80	<i>Barbitistes serricauda</i>	104
<i>Isophya modesta rossica</i>	107	<i>Ancistrura nigrovittata</i>	8
<i>Leptophyes punctatissima</i>	102	<i>Metaplastes ornatus</i>	122
<i>Euconocercus iris</i>	71	<i>Euconocercus iris</i>	71
<i>Scudderia furcata furcata</i>	112	<i>Phaneroptera falcata</i>	130
<i>Phaneroptera falcata</i>	130	<i>Scudderia furcata furcata</i>	112
<i>Tylopsis liliifolia</i>	105	<i>Tylopsis liliifolia</i>	105

Table 2: Locality data and Genbank accession codes for the studied specimens. Abbreviations: # = specimen number (see Table 1); countries: ARM Armenia, AZ Azerbaijan, BG Bulgaria, CY Cyprus, CZ Czech Republic, D Germany, GR Greece, I Italy, MNE Montenegro, SLO Slovenia, TR Turkey, RUS Russian Federation, UA Ukraine, USA United States of America; N, E, S, W cardinal directions; NN elevation above sea level.

#	locality	co-ordinates	Genbank	
			AM 886..	AM 88..
1	GR: Florina: Vernon Mts. near Pisoderion	40°45'N, 21°15'E	537	8857
2	GR: Lakonia: Mistras near Sparti	37°04'N, 22°22'E	538	8858
3	GR: Larissa: 6 km S Nea Monastiri near Farsala	39°15'N, 22°17'E	539	8859
4	BG: Sofija: near Rila monastery	42°10'N, 23°25'E	540	8860
5	BG: Sofija: near Rila monastery	42°10'N, 23°25'E	541	8861
6	GR: Threspotia: Margariti, near Parga	39°22'N, 20°25'E	542	8862
7	GR: Aitolia-Akarnania: near Arachova, Evinos dam	38°40'N, 21°51'E	543	8863
8	GR: Thessaloniki: 1 km S Vasiloudi, near Lake Koronia	40°38'N, 23°11'E	544	8864
9	GR: Kavalla: Pangeon Mt.	40°54'N, 24°5'E	545	8865
10	GR: Evritania: Trikeriotis, below Domnista	38°46'N, 21°50'E	546	8866
11	GR: Florina: Vernon Mts. near Pisoderion	40°45'N, 21°15'E	547	8867
12	GR: Kastoria: above Klissoura	40°34'N, 21°27'E	548	8868
13	GR: Aitolia-Akar: 2 km to Ag. Stephanos, 20 km S Amphiloichia		549	8869
14	GR: Kavalla/Serrai: 4 km E Nea Kerdilia	40°46'N, 23°47'E	550	8870
15	GR: Florina: Vernon Mts. near Pisoderion	40°45'N, 21°15'E	551	8871
16	GR: Chalkidike: 2 km W Lerissos	40°23'N, 23°52'E	552	8872
17	GR: Kavalla: Pangeon Mt.	40°54'N, 24°5'E	553	8873
18	GR: Serrai: S Theodorio (Lake Kerkini)	41°12'N, 22°54'E	554	8874
19	GR: Trikala: Kalambaka	39°42'N, 21°38'E	555	8875
20	TR: Manisa: Sipil Dagħ Milli Parki (ca. 5 km S Manisa)	38°33'N, 27°26'E	556	8876
21	GR: Ilia: Erimanthos valley 6 km E Koumanis	37°48'N, 21°47'E	557	8877
22	GR: Fthiotis: 1 km S Domokos	39°08'N, 22°17'E	558	8878
23	GR: Aegaeen Is.: Island of Paros, above Lefkes	37°3'N, 25°11'E	559	8879
24	BG: Sofija: Pirin Mts. near Damjanika	41°45'N, 23°25'E	560	8880
25	GR: Fthiotis: 1 km S Tsouka	38°56'N, 22°04'E	561	8881
26	GR: Kavalla: Pangeon Mt.	40°54'N, 24°5'E	562	8882
27	GR: Argolis: Mykene	37°44'N, 22°54'E	563	8883
28	GR: Kavalla: Pangeon Mt. or Krinides near Kavalla		564	8884
29	GR: Aitolia-Akar: 2 km to Ag. Stephanos, 20 km S Amphiloichia		565	8885
30	BG: Sofija: Pirin Mts. near Javorov	41°50'N, 23°20'E	566	8886
31	GR: Ioannina: Vikos gorge		567	8887
32	GR: Kavalla: Krinides near Kavala	41°02'N, 24°18'E	568	8888
33	GR: Fthiotis: 5 km W Makririhi	39°05'N, 22°06'E	569	8889
34	GR: Larissa: 3 km NE Nea Monastiri near Farsala	39°15'N, 22°17'E	570	8890
35	GR: Arta: 5 km N Arta	39°09'N, 20°59'E	571	8891
36	GR: Ilia: 3 km NO Koumani	37°48'N, 21°47'E	572	8892
37	GR: Aitolia-Akar: 2 km to Ag. Stephanos, 20 km S Amphiloichia		573	8893

#	locality	co-ordinates	Genbank	
			AM 886..	AM 88..
38	GR: Ioannina: above Konitsa	40°2'N, 20°48'E	574	8894
39	GR: Serrai: s Theodorio (Lake Kerkini)	41°12'N, 22°54'E	575	8895
40	GR: Evritania: Kaliakouda Mts.	38°48'N, 21°47'E	576	8896
41	GR: Evritania: Oxia Mts at Katafigion Grameni Oxia	38°46'N, 21°58'E	577	8897
42	GR: Evritania: Trikeriotis, below Domnista	38°46'N, 21°50'E	578	8898
43	GR: Serrai: Lake Kerkini		579	8899
44	GR: Ioannina: above Konitsa	40°2'N, 20°48'E	580	8900
45	I: Medeazza near Trieste	45°44'N, 13°45'E	581	8901
46	GR: Fokis: 3 km NW Delphi	38°29'N, 22°30'E	582	8902
47	BG: Sofija: Pirin Mts. near Javorov	41°50'N, 23°20'E	583	8903
48	GR: Arkadia: Kalivia Karion	37°25'N, 22°03'E	584	8904
49	TR: Mugla: Tlos, ca. 20 km E Fethiye	36°34'N, 29°23'E	585	8905
50	TR: Antalya: Mts. near Alanya (Güneycik)	36°48'N, 31°48'E	586	8906
52	TR: Isparta: Sultan Dagħ near Aksehir, 1900 mNN	38°17'N, 31°19'E	587	8907
53	TR: Kırklareli: 10 km W Lüleburgaz (branch to Sarıcaali)	41°25'N, 27°15'E	588	8908
54	TR: Aydın: Dilek Yarımadası Milli Parkı (ca. 20 km WSW Söke)	37°42'N, 27°12'E	589	8909
55	TR: Antalya: Xanthos (ca. 130 km SW Antalya)	36°23'N, 29°17'E	590	8910
56	TR: Antalya: Perge (ca. 15 km NE Antalya)	36°58'N, 30°51'E	591	8911
57	GR: Northern Greece		592	8912
58	TR: Isparta: Dav(r)as Mts. above Savköy	37°46'N, 30°43'E	593	8913
59	GR: Arta: Mt. Tsoumerka above Vourgareli, 1850 mNN	39°24'N, 21°9'E	594	8914
61	TR: Konya: Aksehir	38°21'N, 31°29'E	595	8915
62	TR: Manisa: Sipil Dagħ Milli Parkı, 1200mNN (ca. 5 km S Manisa)	38°33'N, 27°26'E	596	8916
63	GR: Aegean Is.: Island of Lesbos, ruins SE Vrişsa	39°2'N, 26°11'E	597	8917
64	TR: Isparta: Dav(r)as Mts. above Savköy	37°46'N, 30°43'E	598	8918
65	UA: surrounding of Lugansk, Lugansk Reserve	47°21'N, 37°3'E	599	8919
66	TR: Antalya: Cirali Olimpos (ca. 60 km SSW Antalya), 10 mNN	36°24'N, 30°28'E	600	8920
67	GR: Aegean Is.: Island of Samos: 3 km NE Mytilinioi	37°44'N, 26°54'E	601	8921
68	GR: Aegean Is.: Island of Lesbos, near Rachidi (S Neochori)	39°1'N, 26°18'E	602	8922
69	TR: İzmir: Bergama, Akropolis	39°8'N, 27°12'E	603	8923
70	UA: surrounding of Lugansk, Lugansk Reserve	47°21'N, 37°3'E	604	8924
71	AZ: near Lenkoran	38°45'N, 48°51'E	605	8925
73	GR: Ionian Is.: Island of Kerkyra, above Spartilas	39°44'N, 19°50'E	606	8926
74	TR: Mugla: above Bayir(koy) (17 km SW Marmaris)	36°43'N, 28°11'E	607	8927
75	GR: Ioannina: Mavrovouni Mts.	39°51'N, 21°7'E	608	8928
77	TR: Rize: above İkizdere, 1500 mNN	40°40'N, 40°42'E	609	8929
78	GR: Aegean Is.: Island of Lesbos, aqueduct near Moria	39°7'N, 26°30'E	610	8930
79	GR: Larissa: near Sikourio	39°45'N, 22°34'E	611	8931
80	GR: İlia: Erimanthos valley 6 km E Koumanis	37°48'N, 21°47'E	612	8932
81	GR: Aegean Is.: Island of İkaria: 3 km NW Ag. Kyrikos	37°37'N, 26°16'E	613	8933
82	GR: Aegean Is.: Island of Chios, Sidiounta S Volissos	38°26'N, 25°58'E	614	8934

#	locality	co-ordinates	Genbank	
			AM 886..	AM 88..
83	GR: Crete: Rethimni: Monastery Preveli	35°9'N, 24°27'E	615	8935
84	I: L'Aquila, Gran Sasso: 10 km westl. Fonte Cerreto, 1300 mNN	42°27'N, 13°25'E	616	8936
85	UA: Kiev & Cherkaska Oblast, near Kanev	49°44'N, 31°30'E	617	8937
87	TR: Konya: Kizkayasi Mts. N Konya, 1700 mNN	38°8'N, 32°31'E	618	8938
88	GR: Aitolia-Akarnania: Bambini, N of Astakos	38°40'N, 21°8'E	619	8939
89	GR: Aegean Is.: Island of Lesbos, ruins SE Vrissa	39°2'N, 26°11'E	620	8940
90	GR: Island of Evia: near Oktonia SSE Kimi, 100 mNN	38°41'N, 24°10'E	621	8941
91	GR: Aegean Is.: Island of Lesbos, aqueduct near Moria	39°7'N, 26°30'E	622	8942
92	GR: Aegean Is.: Island of Samos: near Kallithea	37°44'N, 26°34'E	623	8943
93	GR: Aegean Is.: Island of Rhodos: Lindos	36°5'N, 28°4'E	624	8944
94	GR: Ioannina: Soulion Mts., above Romanos, 1300-1400 mNN	39°23'N, 20°39'E	625	8945
95	GR: Aegean Is.: Island of Samos: Moni Vronta	37°47'N, 26°51'E	626	8946
96	GR: Island of Evia: Dirphys Mts above Steni Dirfios, 500 mNN	38°35'N, 23°49'E	627	8947
97	GR: Ilia: Erimanthos valley 6 km E Koumanis	37°48'N, 21°47'E	628	8948
98	GR: Evros: S Pessani	41°6'N, 26°6'E	629	8949
99	TR: Kirklareli: 10 km W Lüleburgaz (branch to Saricaali)	41°25'N, 27°15'E	630	8950
100	GR: Kavalla: Pangeon Mt.	40°53'N, 24°3'E	631	8951
101	TR: Tekirdagh: 15 km S Corlu	41°4'N, 27°47'E	632	8952
102	D: town of Bonn	50°44'N, 7°06'E	633	8953
103	GR: Fthiotis: Domokos	39°8'N, 22°17'E	634	8954
104	D: Northern Germany: Göttingen (?)		635	8955
105	CY: Paphos, Anarita	34°45'N, 32°32'E	636	8956
106	TR: Tekirdagh: 15 km S Corlu	41°4'N, 27°47'E	637	8957
107	UA: Cherkaska Oblast: Kanev, Forest Reserve	49°44'N, 31°30'E	638	8958
108	TR: Tekirdagh: 15 km S Corlu	41°4'N, 27°47'E	639	8959
109	GR: Evros: Forrest of Dadia	41°9'N, 26°13'E	640	8960
110	MNE: Montenegro/Kosovo: above Cakor-Pass, 2000 mNN	42°42'N, 20°5'E	641	8961
111	GR: Ioannina: Mt. Tomaros above Achladia	39°28'N, 20°47'E	642	8962
112	USA: Kansas: near Lawrence, Perry Lake	39°17'N, 95°26'W	643	8963
115	TR: Orhangazi	40°31'N, 29°20'E	645	8965
116	GR: Xanthi	41°09'N, 24°54'E	646	8966
117	TR: Balıkesir	39°41'N, 28°00'E	647	8967
118	TR: Demirköy	41°49'N, 27°45'E	648	8968
119	TR: Kirklareli: Igneada	41°53'N, 27°59'E	649	8969
120	TR: 9 km S Karasu	41°02'N, 30°37'E	650	8970
121	TR: Hasanlar Baraji (Düzke)	40°56'N, 31°18'E	651	8971
122	GR: Fthiotis: Vitoli near Makrakomi	38°58'N, 22°00'E	652	8972
123	UA: Crimea: near Yalta	44°30'N, 34°10'E	653	8973
124	TR: above Denizli	37°39'N, 29°14'E	654	8974
125	TR: Safranbolu	41°18'N, 32°42'E	655	8975
126	TR: 10 km S Bozdoğan	37°36'N, 28°21'E	656	8976



#	locality	co-ordinates	Genbank	
			AM 886..	AM 88..
127	BG: Tundzha valley, Elhovo, Polne Topchiya reserve		657	8977
128	GR: Aegaeon Is.: Island of Karpathos, Mt. Lastos, 900 mNN	35°34'N, 27°09'E	658	8978
129	TR: Sivas: Camlibel-Pass, 1600 mNN	39°58'N, 36°31'E	659	8979
130	D: Rhöndorf near Bonn	50°39'N, 7°12'E	660	8980
131	SLO: Brje pri Komnu, ca. 20 km NW Sezana		661	8981
132	CZ: Bile Karpaty, near Velka nad Velickou		662	8982
133	GR: Achaia: Leontio, 1300 mNN	38°7'N, 21°55'E	663	8983
134	GR: Aegaeon Is.: Island of Paros, above Lefkes	37°3'N, 25°11'E	664	8984
135	SLO: Slavnik	45°32'N, 13°58'E	665	8985
136	TR: 5 km E Eskipaza	40°36'N, 32°28'E	666	8986
137	TR: Mugla: Labranda	37°24'N, 27°42'E	667	8987
138	TR: Safranbolu	41°15'N, 32°42'E	668	8988
140	TR: 5km NW Ivridi	39°37'N, 27°28'E	669	8989
141	TR: Orhangazi	40°31'N, 29°25'E	670	8990
142	TR: Susurluk	39°52'N, 28°10'E	671	8991
143	TR: Izmir: Zeytinlik near Ödemiş	38°17'N, 28°01'E	672	8992
144	SLO: Grize, 15 km NE Trieste	45°45'N, 13°56'E	673	8993
145	ARM: Syunik: 5 km W Goris	39°30'N, 46°20'E	674	8994
146	TR: Bandirma	40° 22'N, 27°55'E	675	8995
147	RUS: near Novorossiysk, village of Gayduk	44°47'N, 37°41'E	676	8996
148	BG: C Danubian plane, N Pleven, near road to Nikopol		677	8997
149	GR: Larissa: Sikorio	39°46'N, 22°36'E	678	8998
150	BG: C Danubian plane, N Pleven, near road to Nikopol		679	8999
151	TR: Istanbul: Catalca	41°8'N, 28°28'E	680	9000
152	TR: Antalya: Bakirlidag-Pozan, 1400 mNN		681	9001
153	TR: Konya: Seydiselik, Bulunyo Yoylosi, 1560 mNN	37°45'N, 32°05'E	682	9002
154	TR: Istanbul: Belgrad Orm., Büyükbent (Fidanlikta)	41°11'N, 28°57'E	683	9003
155	TR: Denizli-Antalya road, 18 km, Yol kenari, Fidanlik		684	9004
156	TR: Corum-Iskilip road, 700 mNN	40°40'N, 34°27'E	685	9005
157	TR: Sanliurfa-Viransehir road, 50th km	37°14'N, 39°15'E	686	9006
158	TR: Corum-Iskilip: ilce girisi, 675 mNN	40°42'N, 34°29'E	687	9007
159	TR: Mugla: Dalyan, Iztuzu, 239 mNN	36°46'N, 28°40'E	688	9008
160	TR: Malatya: Arapgir, Kuylan Göldagi	39°0'N, 38°22'E	689	9009
161	TR: Nigde: Ulukisla Ciftehan, Karagöl yaylasi, 1530 mNN	37°29'N, 34°45'E	690	9010
162	TR: Artvin: Ardanuc, 2230 mNN, Kutul yaylasi, orman kenari	41°04'N, 42°13'E	691	9011
163	TR: Balikesir: Kazdagi, Sarikiz		692	9012

Table 3: Additional data for the studied specimens. Abbreviations: # = specimen number (see Table 2); Pörschmann et al. = U. Pörschmann, K. Reinhold , K. Strauß, B. Ullrich; ZFMK Zoologisches Forschungsmuseum Alexander König; CH Collectio Heller; \* according to BOZTEPE et al. 2013.

#	date	Sex	Deposition	Specimen-code	remarks	collector
1	19.07.2001			H 29		K.-G. Heller
2				H 09/#19		K. Pollmann & K. Reinhold
3				H 11/#22		K. Pollmann & K. Reinhold
4	21.07.2001			H 23	topotype	K.-G. Heller
5	21.07.2001			H 24		K.-G. Heller
6				H 13		K. Reinhold
7				H 27		D. v. Helversen
8				H 18/#26		K. Pollmann & K. Reinhold
9	24-5.7.2001			H 35		K.-G. Heller
10				H 36		D. v. Helversen
11	19.07.2001			H 30		K.-G. Heller
12	19.07.2001			H 26	topotype	K.-G. Heller
13				H 20/#43		K. Pollmann & K. Reinhold
14				H 19/#45		K. Pollmann & K. Reinhold
15	19.07.2001			H 28		K.-G. Heller
16				H 16/#35		K. Pollmann & K. Reinhold
17	24-5.7.2001			H 21		K.-G. Heller
18	20.07.2001			H 70		K.-G. & M. Heller
19				H 52		K. Pollmann & K. Reinhold
20	2001			H 39	topotype	K.-G. Heller
21	06.1997			H 48		K.-G. Heller
22				H 17/#17	topotype	K. Pollmann & K. Reinhold
23	17.05.1991			H 46	topotype	K. Reinhold
24	22.07.2001	f		H 41	topotype	K.-G. & M. Heller
25				H 14/# 46	topotype	K. Pollmann & K. Reinhold
26	24-5.7.2001			H 40		K.-G. & M. Heller
27				H 8		K. Pollmann & K. Reinhold
28	05.2001			H 49		
29				H 10/#42		K. Pollmann & K. Reinhold
30	22.07.2001	m		H 37	topotype	K.-G. & M. Heller
31	1993			H 53		K. Reinhold
32				1 H/#29		K. Pollmann & K. Reinhold
33				7 H/#18		K. Pollmann & K. Reinhold
34				4 H/#23		K. Pollmann & K. Reinhold
35				2 H/#44		K. Pollmann & K. Reinhold
36				5 H/#7		K. Pollmann & K. Reinhold
37				H 50		
38	18.07.2001			H 69		K.-G. & M. Heller
39	20.07.2001			H 34		K.-G. & M. Heller
40	29.07.2001			H 32		K.-G. & M. Heller
41	27.07.2001			H 25		K.-G. & M. Heller
42				H 72		D. v. Helversen

#	date	Sex	Deposition	Specimen-code	remarks	collector
43				H 51		
44	18.07.2001			H 33		K.-G. & M. Heller
45				H 15		
46				H 12/#16		
47	22.07.2001			H 31		K.-G. & M. Heller
48	2000				<i>P. artedentatus</i> Nachzucht 2001	
49	06.06.2000	m	ZFMK	5440		K.-G. Heller
50	11.07.2002	m	ZFMK	5666		K.-G. Heller
52	28.06.2002	m	ZFMK	5608		K.-G. Heller
53	01.05.1996	m	ZFMK	4582		H. Braun
54	11.06.2000	f	ZFMK	5480		K.-G. Heller
55	05.06.2000	m	ZFMK	5410		K.-G. Heller
56	29.05.2000	m	ZFMK	5474		K.-G. Heller
57	30.06.1993	m	ZFMK	5077		M. Holderied
58	27.06.2002	m	CH	5579		K.-G. Heller
59	06.08.2003	m	CH	6291		KG. & M. Heller, M. Volleth
61	29.06.2002	m	ZFMK	5616		K.-G. Heller
62	13.06.2000	m	CH	5430		K.-G. Heller
63	23.05.1993	m	CH	2981		K.-G. Heller
64	27.06.2002	m	CH	5585		K.-G. Heller
65	12.06.1996	m	CH	4632		A. Benediktow
66	28.05.2000	m	CH	5451	paratype	K.-G. Heller
67	19.05.1998	m	CH	5096		KG Heller & M Volleth
68	22.05.1993	m	ZFMK	3016		K.-G. Heller
69	26.04.1985	m	ZFMK	0260	topotype	K.-G. Heller
70	12.06.1996	m	CH	4631		A. Benediktow
71	04.1987	m	CH	3062		R. D. Zhantiev
73	14.07.2004	m	ZFMK	6356		K.-G. Heller, M. Heller
74	08.06.2000	m	ZFMK	5421		K.-G. Heller
75	25.08.1988	m	ZFMK	2361		K.-G. Heller
77	07.08.1987	m	ZFMK	2743		K. Reinhold
78	1994	f	ZFMK	5069		K.-G. Heller
79	26.05.1989	m	ZFMK	2492		K.-G. Heller
80	01.06.1997	f	ZFMK	5080		K.-G. Heller
81	22.05.1998	m	ZFMK	5106		KG Heller & M Volleth
82	20.05.1995	m	ZFMK	4452		K.-G. Heller
83	01.05.1993	f	ZFMK	3034		K. Rohrseitz
84	01.09.1996	m	ZFMK	5085		K.-G. Heller
85	18.06.1996	f	ZFMK	4486		K.-G. Heller
87	29.06.2002	m	ZFMK	5624		K.-G. Heller
88	25.05.1992	m	ZFMK	2959		K.-G. Heller
89	01.03.1994	m	ZFMK	5061		K.-G. Heller
90	10.06.1999	m	ZFMK	4750		KG Heller & M Volleth
91	1994	f	ZFMK	5066		K.-G. Heller
92	21.05.1998	m	ZFMK	5102		KG Heller & M Volleth
93	18-9.04.1983	m	ZFMK	0458		K.-G. Heller

#	date	Sex	Deposition	Specimen-code	remarks	collector
94	27.06.1999	f	ZFMK	4827	topotype	KG Heller & M Volleth
95	21.05.1998	m	ZFMK	5101		KG Heller & M Volleth
96	18.06.1999	m	ZFMK	4753		KG Heller & M Volleth
97	06.1997			52		K.-G. Heller
98	01.05.1996	m	CH	4614a/57		H. Braun
99	01.05.1996	m	CH	4597a		H. Braun
100	24.07.2001			70		K.-G. & M. Heller
101	01.05.1996	m	CH	4598a		H. Braun
102	10.08.2001			76		K. Reinhold
103	04.06.1998	m	ZFMK	4448	topotype	KG Heller & M Volleth
104				74		A. Stumpner
105	28.04.2001			H 43		K.-G. Heller
106	01.05.1996	m	CH	4599a		H. Braun
107	18.06.1996	m	CH	3334a		K.-G. Heller
108	01.05.1996	m	CH	4608a		H. Braun
109	01.05.1996	m	CH	4611a		H. Braun
110	18.08.1988	m	ZFMK	2442		K. Reinhold
111	10.06.1998	m	ZFMK	5140		KG Heller & M Volleth
112	1996	f	ZFMK	3995		K.-G. Heller
115	30.05.2005					Pörschmann et al.
116	11.06.2005					Pörschmann et al.
117	01.06.2005					Pörschmann et al.
118	27.05.2005					Pörschmann et al.
119	27.05.2005					Pörschmann et al.
120	28.05.2005					Pörschmann et al.
121	29.05.2005					Pörschmann et al.
122	22.05.2005					Pörschmann et al.
123	30.06.1996	m	no remainings	X326		R. D. Zhantiev
124	07.06.2005					Pörschmann et al.
125	27.05.2005					Pörschmann et al.
126	06.06.2005					Pörschmann et al.
127	17.06.2005					D.Chobanov
128	15.05.2005	m	ZFMK	6465		K.-G. Heller, M. Heller, M. Volleth, E. Wolter
129	26.07.1987	m	CH	2744		K. Reinhold
130	27.07.2001					K. Reinhold
131						A. Stumpner
132	27.06.2005					F. Chládek
133	11.06.1997	m	ZFMK	5128		Jay McCartney
134	17.05.1991	m	CH	2614	paratype	K. Reinhold
135	07.2004					Lehmann
136	29.05.2005					Pörschmann et al.
137	02.05.1985	f	CH	0263		K.-G. Heller
138	29.05.2005					Pörschmann et al.
140	02.06.2005					Pörschmann et al.
141	31.05.2005					Pörschmann et al.
142	02.06.2005				turcicus?	Pörschmann et al.

#	date	Sex	Deposition	Specimen-code	remarks	collector
143	04.06.2005					Pörschmann et al.
144	05.1986	m	CH	0038		E. Blümm
145	04.07.2005					M. Kalashian
146	01.06.2005					Pörschmann et al.
147	26.06.2005	m	CH	6653	topotype	O. Korsunovskava
148	27.07.2005	m				D. Chobanov
149	24.05.2005					Pörschmann et al.
150	27.07.2005	f				D. Chobanov
151	28.06.2001					H. Sevgili
152	06.2004			#Ciplak:91;2004G1L004		B. Ciplak
153	18.07.2003			#Ciplak:10;2003G1L003		B. Ciplak
154	08.06.2001					H. Sevgili
155	27.05.2002					H. Sevgili & Y. Durmus
156	12.06.2001					H. Sevgili
157	17.05.2002					H. Sevgili
158	11.06.2001					H. Sevgili
159	27.05.2002					H. Sevgili & Y. Durmus
160	14.07.2002					H. Sevgili
161	24.06.2001					H. Sevgili
162	26.07.2002					H. Sevgili
163	03.07.2004			#Sevgili: 26	<i>Poec. helleri</i> *	H. Sevgili

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